JUL 28 2005
PATENT & TRADEMARK OFFICE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group Art Unit:	2664	
Examiner:	Raj K. Jain	
Inventor:	Huang, et al.	
Serial No.:	09/764,746	**REASONS FOR PRE-APPEAL BRIEF CONFERENCE REQUEST**
Filed:	1/18/2001	
For:	Packet Loss Compensation Method Using Injection of Spectrally Shaped Noise	
Atty. Docket:	481340-010032	

CERTIFICATE OF MAILING

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Signature: Suzanne Koston

Typed or Printed Name: Suzanne Koston

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The Examiner has twice rejected claims 1-5 under 35 U.S.C. § 103(a) as being unpatentable over Chen (U.S. Pat. No. 5,615,298) in view of Gustafsson et al. (U.S. Pat. No. 6,459,914). The rejections of claims 1-5 are now appealed. The Applicant hereby requests review of the final rejection prior to filing an appeal brief for the reasons set forth below. The Applicant submits that the Final Rejection is based upon clear errors in fact and fails to establish a prima facie case of obviousness.

REASONS FOR PRE-APPEAL BRIEF CONFERENCE REQUEST

I. PROSECUTION SUMMARY

Claims 1-5 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Chen in view of Gustafsson in the First Office Action dated September 20, 2004 ("First Office Action"). The Applicant traversed the rejection in a Reply dated December 20, 2004 ("Reply") on the following grounds:

1) In combination with Gustafsson, Chen only discloses the use of LPC excitation signal (i.e., voice data) from previous frames to generate an excitation signal for a lost packet, while claims 1 and 3 recite the use of white noise applied to a filter for generating a noise packet (see Reply, page 2). Thus, Chen and Gustafsson, when combined, do not disclose, teach or suggest the "applying white noise to said filter for generating a noise packet which has the same power spectrum as said stored one of said packets" as claimed in claim 1 and "a white noise generator for applying white noise to said filter which in response generates a noise packet which has the same power spectrum as said stored one of said packets" as claimed in claim 3.

2) In combination with Chen, Gustafsson's teaching of estimating the power spectrum of background noise during periods of silence does not disclose, teach or suggest the claimed limitations of "estimating the power spectrum $\boldsymbol{P}(\omega)$ of a stored one of said packets previous to said missing voice packet" as claimed in claim 1 and "a power spectrum estimator for estimating the power spectrum $\boldsymbol{P}(\omega)$ of a stored one of said packets previous to said missing voice packet" as claimed in claim 3 because the "stored one of said packets" is a voice packet and not a packet from a period of silence (see Reply, pages 2-3).

The Examiner found these arguments unpersuasive and issued a final office action dated April 27, 2005 ("Final Office Action"). In the Final Office Action, the Examiner stated:

> The term "white noise" is often used when referring to a signal or vibration where the spectral density is flat with respect to frequency. A speech signal is regarded analytically as being composed of an excitation signal and a transfer function. The excitation component is further classified as being voiced or unvoiced, depending on whether or not there is a fundamental frequency imparted to the air stream by the vocal cords...Such noise functions are characterized by the power spectrum per unit frequency interval. For excitation function feature vector formation, either a pattern (or curve fit) of the spectrum can be stored, or a numerical value can be stored which represents one of the small number of unvoiced excitation spectra needed for an application. Thus, Chen discloses the smoothing application protocol for a white noise insertion, which can be applied to stored packets as well. The white noise created packet may then be transmitted with the voice signal to fill missing packets and/or voids and allow for uniform spectral density.

Final Office Action, pages 4-5.

II. CLEAR ERROR IN FACT

The Examiner's interpretation of "white noise" as claimed essentially collapses all distinctions between white noise, voice, background noise, silence, and the like. The Examiner is essentially arguing that all acoustic data reads on white noise because all noise - speech, background noise, or even silence - can be modeled by applying a transfer function to a flat spectrum of white noise. The Examiner's position is tantamount to the position that a solid block of steel anticipates all articles of manufacture made of steel because the block of steel can undergo a function -- such as machining or melting and subsequent molding -- and thus be cast into the claimed articles of manufacture made of steel. This is clearly an incorrect interpretation of "white noise" from the viewpoint of one of ordinary skill in the art.[1] Accordingly, the Examiner's determination that Chen and Gustafsson, when combined, disclose, teach or suggest "applying white noise to said filter for generating a noise packet which has the same power spectrum as said stored one of said packets" as claimed in claim 1 and "a white noise generator for applying white noise to said filter which in response generates a noise packet which has the

same power spectrum as said stored one of said packets" as claimed in claim 3 is based on a factually incorrect assertion that all acoustic noise reads on "white noise" and thus cannot stand.

III. FAILURE TO ESTABLISH A PRIMA FACIE CASE OF OBVIOUSNESS

As noted in the Reply, Gustafsson's teaching of estimating the power spectrum of background noise during periods of silence does not disclose, teach or suggest the claimed limitations of "estimating the power spectrum $\boldsymbol{P}(\omega)$ of a stored one of said packets" because the stored packets are voice packets, not packets from a period of silence. The Examiner failed to respond to this argument in the Final Office Action, and only cited Gustafsson as estimating the power spectrum during speech pauses or silence after admitting that Chen failed to disclose estimating the power spectrum of one of the stored voice packets. Final Office Action, page 3. The Examiner only combines Chen and Gustafsson and does not provide any modification of Gustafsson or Chen to arrive at estimating the power spectrum of voice packets, nor does the Examiner provide any motivation or teaching necessary for such modification. It is thus clearly apparent that the Examiner has failed to show how Chen and Gustafsson, when combined, estimate the power spectrum of a voice packet in the manner claimed in claims 1 and 3.

Additionally, the Examiner does not show how Chen and Gustafsson, when combined, disclose a filter having a transfer function of $|\boldsymbol{H}(\omega)|^2 = \boldsymbol{P}(\omega)$. First, and most telling of the shortcomings of the Final Office Action, the Examiner admits that Chen fails to disclose the estimation of the power spectrum on one of the stored packets. Thus, it is impossible for Chen to disclose a filter having a transfer function of $|\boldsymbol{H}(\omega)|^2 = \boldsymbol{P}(\omega)$, as asserted by the Examiner, because a necessary prerequisite is the estimation of the power spectrum $\boldsymbol{P}(\omega)$ of one of the

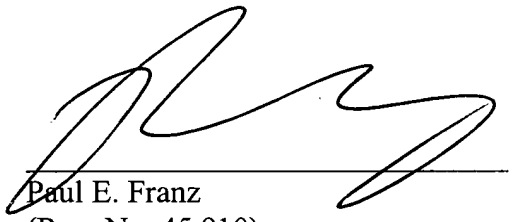
[1] In addition to being factually incorrect, the Examiner's interpretation is also unreasonably broad. See MPEP § 2111.

stored voice packets. Additionally, as explained above, the Examiner does not show how Chen and Gustafsson, when combined, disclose the estimation of a power spectrum of a voice packet.

The Applicant respectfully requests the withdrawal of the rejections in light of the aforementioned arguments. It is believed that the application, as now presented, is in condition for allowance and that a Notice of Allowability be issued.

Respectfully submitted,

JONES DAY



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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional): 481340010032

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on July 26, 2005

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Application Number	Filed
09/764746	1/18/01

First Named Inventor: Huang et al.

Art Unit	Examiner
2664	Raj K. Jain

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
Note: No more than five (5) pages may be provided.

I am the

- [ ] applicant/inventor.
- [ ] assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)
- [X] attorney or agent of record. Registration number 45,910
- [ ] attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____

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July 26, 2005
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NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

[X] *Total of 2 forms are submitted.

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